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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/624,268

07/22/2003

Mark J. Summer

13879

7489

7590

05/31/2006

PAUL F. DONOVAN
ILLINOIS TOOL WORKS INC.
3600 WEST LAKE AVENUE
GLENVIEW, IL 60025

EXAMINER

MIGGINS, MICHAEL C

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,268

Applicant(s)

SUMMER, MARK J.

Examiner

Michael C. Miggins

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

REJECTIONS WITHDRAWN

1. All of the rejections maintained in the final rejection of 11/3/05, page 2, Rejections Repeated have been withdrawn.

REJECTIONS REPEATED

2. There are no rejections repeated.

NEW REJECTIONS

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US 6494866).

Robinson discloses a molded plastic rod comprising a barrel formed by an injection molding process (column 3, lines 10-15 and column 2, lines 35-52) along the length thereof (column 3, lines 10-37 and Fig. 6), an injection stress relieving formation (42 from Fig. 3, column 2, line 60 through column 3, lines 1-9, since the thread portions protect the gate vestige 45) in said barrel adjacent said injection site (45 from Fig. 3, column 2, line 60 through column 3, lines 1-9), including first and second injection stress

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relieving formations on opposite sides of said injection site (42 from Fig. 3, since the threads are separated by flat portion 44), said first and second injection stress relieving formations being outward projections from the surface of said barrel (42 from Fig. 3), said first and second elongated stress-relieving projections having tapered ends (42 from Fig. 3, since the threads are tapered into flat region 44) (applies to instant claims 1-3 and 5). The threading (42 from Fig. 3) is necessarily a stress relieving formation for gate vestige injection site (45 from Fig. 3) because it surrounds and protects the gate vestige injection site and it would have been obvious to have provided a stress relieving formation in order to prevent cracking or breaking of the barrel.

With regard to claims 4 and 6-8 which recite different shapes and dimensions for the stress relieving formations, it has been found that a change in shape is obvious and well within the level of one of ordinary skill in the art (MPEP 2144). It would have been obvious to one of ordinary skill in the art to have provided the recited shapes and dimensions in order to provide an easier method through the use of less material, a snap on type cap (24), or to further protect the gate vestige (45 from Fig. 5).

5. Claims 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US 6494866) in view of Raitto (US 4363329).

Claim 12 recites an intended use ("for a hydrometer of a storage battery") and has been given little to no patentable weight since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed

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does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Robinson discloses a molded plastic rod comprising a barrel formed by an injection molding process (column 3, lines 10-15 and column 2, lines 35-52) along the length thereof (column 3, lines 10-37 and Fig. 6), an injection stress relieving formation (42 from Fig. 3, column 2, line 60 through column 3, lines 1-9, since the thread portions protect the gate vestige 45) in said barrel adjacent said injection site (45 from Fig. 3, column 2, line 60 through column 3, lines 1-9), including first and second injection stress relieving formations on opposite sides of said injection site (42 from Fig. 3, since the threads are separated by flat portion 44), said first and second injection stress relieving formations being outward projections from the surface of said barrel (42 from Fig. 3), said first and second elongated stress-relieving projections having tapered ends (42 from Fig. 3, since the threads are tapered into flat region 44) (applies to instant claims 12-14 and 16). The threading (42 from Fig. 3) is necessarily a stress relieving formation for gate vestige injection site (45 from Fig. 3) because it surrounds and protects the gate vestige injection site and it would have been obvious to have provided a stress relieving formation in order to prevent cracking or breaking of the barrel.

Robinson does not specifically disclose a light transmissive barrel of acrylic.

Raitto discloses a barrel which is light transmissive and is of acrylic (column 5, lines 17-47) (applies to instant claims 9-12) for the purpose of reducing cost and/or improved transparency.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided a barrel which is light transmissive and is of acrylic in the invention of Robinson in order to provide reduced costs and/or improved transparency.

With regard to claims 15, 17-19 which recite different shapes and dimensions for the stress relieving formations, it has been found that a change in shape is obvious and well within the level of one of ordinary skill in the art (MPEP 2144). It would have been obvious to one of ordinary skill in the art to have provided the recited shapes and dimensions in order to provide an easier method through the use of less material, a snap on type cap (24, Robinson), or to further protect the gate vestige (45 from Fig. 5, Robinson).

6. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (US 6494866) in view of Nedbal (US 5180643).

Robinson discloses a method of making a plastic rod comprising a barrel formed by an injection molding process (column 3, lines 10-15 and column 2, lines 35-52) along the length thereof (column 3, lines 10-37 and Fig. 6), an injection stress relieving formation (42 from Fig. 3, column 2, line 60 through column 3, lines 1-9, since the thread portions protect the gate vestige 45) in said barrel adjacent said injection site (45 from Fig. 3, column 2, line 60 through column 3, lines 1-9), including first and second injection stress relieving formations on opposite sides of said injection site (42 from Fig. 3, since the threads are separated by flat portion 44), providing a mold having an

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elongated barrel forming portion and an injection gate along the barrel-forming portion (Fig. 8 and column 3, lines 10-37), providing a pocket in the mold adjacent the injection gate (Fig. 8 and column 3, lines 10-37) and injecting plastic into the mold (Fig. 8 and column 3, lines 10-37). The threading (42 from Fig. 3) is necessarily a stress relieving formation for gate vestige injection site (45 from Fig. 3) because it surrounds and protects the gate vestige injection site and it would have been obvious to have provided a stress relieving formation in order to prevent cracking or breaking of the barrel.

Robinson fails to disclose a method of using a plastic rod by providing a battery having an opening and inserting the rod into a battery.

Nedbal discloses a method of using a plastic rod by providing a battery having an opening and inserting the rod into a battery (column 3, lines 50-68, column 4, lines 43-59 and Fig. 1) (applies to instant claims 20-21) for the purpose of measuring the level and density of an electrolytic fluid.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provide a method of using a plastic rod by providing a battery having an opening and inserting the rod into a battery in the method of Robinson in order to measure the level and density of an electrolytic fluid.

ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's arguments filed 3/6/06 have been carefully considered but are moot in view of the new grounds for rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is 571-272-1494. The examiner can normally be reached on 1:00-10:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MCM
May 15, 2006

Michael C. Miggins
Primary Examiner
Art Unit 1772

